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ADDRESS OF THE EDITOR

Malcolm Ellis, Hon. Editor, The Avicultural Magazine, The Chalet, Hay Farm, St. Breock, Wadebridge, Cornwall PL27 7LL, England.
E-mail: editor@avisoc.co.uk

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VISUALLY SEXING THE SENEGAL PARROT *Poicephalus senegalus* TOGETHER WITH AN EXAMPLE OF SOCIAL BREEDING BEHAVIOUR BY THIS SPECIES

by Paolo Bertagnolio

A reliable way of visually sexing the Senegal Parrot *Poicephalus senegalus* linked to the colour of the under tail-coverts - those of the male being yellow or almost completely yellow and those of the female being green or yellowish-green - was, to my knowledge, mentioned first by Silva (1991), but was subsequently ignored in later ornithological literature by, for example, Borrow & Demey (2001), Collar in del Hoyo et al. (1997), Forshaw (2006) and Juniper & Parr (1998), etc.

A few years ago I realised there is another easy way to distinguish between the male and female adult Senegal Parrot. With the male, the green of the chest ends in a V-shaped pattern which barely reaches the abdomen¹, whereas with the female the green extends down to the lower abdomen and between the legs. On the internet, an author wrote recently that: "The V-shape of the vest is usually longer in females, the green area extending down over the chest to between the legs, whereas in males the tip of the green area ends midway down the chest." I go along with this, but would exclude the word "usually."

Here in the northern hemisphere the Senegal Parrot tends to breed during the winter months. At the Centro per lo Studio e la Conservazione degli Psittaciformi (CSCP) here in Italy, the female of a pair of the orange-bellied form *P. s. versteri*, for years ignored the nest box and laid in December or January in a hole she excavated in the ground. If not removed just after hatching, the chicks invariably died when only one or two days old.

¹The bird belonging to the nominate form depicted by Bill Cooper in *Parrots of the World* by Cooper & Forshaw (Doubleday & Company, Inc., 1973) fits this description and is shown to be an adult male.

At the beginning of 2009, the pair was moved to a different flight in which for the first time the female laid in June in a conventional nest box and successfully raised four young, which were left with their parents in an attempt to discourage the pair from nesting again during the winter. In February 2010, however, much to my surprise there were seven birds in the flight and, on checking in the nest box, I discovered a further two chicks ready to fledge. During the following three or four weeks the group was kept under close observation from some distance, through a pair of binoculars, and on two occasions I witnessed one of the freshly fledged young, easily recognised by its almost completely green underparts, being fed by one of its siblings that had hatched the previous year.

No doubt the presence of so many birds in the nest box during the cold winter nights (when the temperature occasionally dropped to -1.7°C to -2.2°C (29°F - 28°F)) helped to generate sufficient warmth to prevent the freshly hatched chicks becoming chilled. Considering the size of the nest box, which measured 18cm x 18cm (7in x 7in) square, the young from 2009 and their parents, must have had to move around very cautiously, so as not to damage the eggs or trample on the freshly hatched chicks. Whether the cooperation of the 2009 young extended to assisting with the incubation of the eggs and/or the care of the chicks while they remained in the nest, must remain a matter of conjecture.

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*It would be interesting to hear from any members who keep and breed the Senegal Parrot, and also anyone who keeps and breeds the Hawk-headed Parrot *Deropcyus accipitrinus* (see Vol.117, No.2, p.51 (2011)), whether their observations confirm the author's findings. - Ed.*

LORIKEET EXHIBITS IN UK ZOOS

by Rosemary Low

I bought my first lories in 1971 and have specialised in these birds ever since. Indeed, my oldest bird, a Yellow-streaked Lory *Chalcopsitta sintillata*, which has now been with me for more than 35 years, originates from that decade. As Curator of Birds at Loro Parque, Tenerife, and Palmitos Park, Gran Canaria, during the late 1980s and 1990s, I was very fortunate to have in my care almost every species of lory in aviculture, excluding certain Australian species which were not permitted to be exported.

I have seen the popularity of lories and lorikeets in aviculture rise and fall like a big dipper. In the late 1970s, when many species were imported commercially for the first time, they reached the height of popularity. However, in the late 1980s and early 1990s, when dealers brought in large numbers of wild-caught birds at low prices, many breeders sold up. The birds went to dealers who sold them abroad. Gradually the numbers in the UK fell to the low level of the current decade.

In the early 1990s, some zoos in the USA followed the example of San Diego Zoo and set up lorikeet exhibits where the public could feed the birds, which would descend onto their hands to take nectar from tiny pots. The public bought this food and as a result the idea that money can be made from such exhibits gradually spread to the UK. New lorikeet exhibits, usually with Rainbow (Swainson's) Lorikeets *Trichoglossus haematodus moluccanus* or Green-naped Lorikeets *T. h. haematodus*, are still being opened.

Unfortunately, some of these leave a lot to be desired. It seems that lorikeets are being exploited - the commercial aspect apparently taking priority over proper management. As an example of good management, Paradise Park in Cornwall can hardly be bettered. Indeed, staff from other lorikeet exhibits have visited Paradise Park to learn the correct method. This approach is to be recommended, especially if they act on what they have learned.

Source of stock

Quarantine methods

There are some important lessons that need to be learned by any zoo that is considering opening a lorikeet exhibit. At Paradise Park, Curator David Woolcock had the good sense to set up pairs of Rainbow and Green-naped Lorikeets well in advance of the exhibit opening and to breed the required birds. Indeed, from the initial 10 Rainbow Lorikeets acquired from a UK breeder in 2004, well over 60 young have been reared. These young are used in the exhibit, not the breeding pairs. The advantage was that the birds were

known to be healthy and could be trained to take food from an early age. The disadvantage was that large numbers were not available initially.

What other zoos have done when seeking to open a lorikeet exhibit is enquire about how many birds were available from UK breeders and, finding that sufficient numbers could not be acquired from a single source, at least three UK zoos acquired birds from a dealer in the Netherlands. These birds had come from various collections. The result was that these zoos received birds that tested positive for PBFD (psittacine beak and feather disease) and/or polyomavirus. One zoo decided to euthanase all these birds. In the same quarantine space, however, there were at least eight birds from a reliable breeder in the UK. They were in perfect health, but they too were euthanased. The breeder was devastated to learn this. A zoo should know better than to bring in birds before another group has completed its quarantine.

At another UK zoo

At another UK zoo, when several of its newly arrived birds tested positive for PBFD, it was decided to manage the flock as if it is in permanent quarantine. Keepers who look after these birds do not enter the aviaries of other birds, use foot dips at the entrance and change their boots and overalls when they clean out the lorikeet exhibit. It is to be hoped that none of these lorikeets will be allowed to leave the collection. I suspect that even disease testing is not adequate to identify diseased birds that could unknowingly be sold, because it depends on birds shedding the virus at the time they are tested.

Several lorikeets at this zoo died within the first two months and on autopsy were found to have the adenovirus. The risk involved in bringing in lorikeets that have not been blood-tested for disease cannot be overstated. Refusal to buy birds that have not been disease-tested does at least send out a message to the seller that the disease risk is being taken seriously.

Feeding of lorikeets in zoo exhibits

Another serious concern is that relating to the quality of food offered to the lorikeets. In one case, the manager of a lorikeet exhibit admitted that the birds were not in good feather and the breeding results were very poor. On enquiring about the food, I understood why. They were being fed a commercial product of inferior quality. Unfortunately, many lorikeets are fed this food because it is one of the least expensive and most readily available in the UK. Good quality lory foods are not cheap.

At Paradise Park an excellent mixture is made from a variety of nutritious ingredients and the staff there will readily share the recipe with anyone who enquires.

Does profit come first?

Despite the disease problems, the poor feather condition of the birds and poor breeding results, the management of one lory exhibit was delighted because it had proved extremely profitable through the sale of pots of nectar. I would appeal to all zoos that keep these delightful birds in walk-through aviaries to consider the welfare of their lorikeets first. Some zoos are doing a great disservice to lory keeping in the UK and to aviculture in general by entrusting these birds to the care of inadequately trained staff who often do not understand their requirements and whose superiors have not taken the trouble to find out what these birds need.

Warning

Lories and lorikeets are among the most aggressive birds and cannot normally be kept in a colony. The two subspecies mentioned are exceptions. Some zoos have, despite advice to the contrary, set up exhibits using several lory species - because it looks more colourful. This is irresponsible because it inevitably ends in deaths.

One zoo claims that young birds of various species can be kept together. This is another myth because even young lorikeets will kill those of another species. It saddens me greatly at a time when the numbers of lories and lorikeets in aviculture are declining that they are misused in this way - to say nothing of terrified birds being hounded and attacked by others and fatally injured.

Conclusion

Those considering opening lorikeet exhibits need to think long-term. The recommended procedure is to acquire young pairs and set them up for breeding - one pair per aviary - and use the young in the exhibit. These young birds will be much easier to train to take food from the public than birds (often of unknown age) acquired from a dealer. Even more importantly, this eliminates the risk of starting the exhibit with diseased birds.

The sixth annual Lory Conference, which was organised by Rosemary and Ventura Events and held at Twycross Zoo in Warwickshire on June 12th, was attended by 51 enthusiasts and was a great success. If you have any questions about keeping and breeding lories and lorikeets and, specifically about their diets, I am sure that Rosemary or David Woolcock will be pleased to answer your questions.

E-mail: rosemary.low@virgin.net/david@paradisepark.org.uk - Ed.

THE CHESTNUT-BACKED THRUSH *Zoothera dohertyi*

by Gary Bralsford

The Chestnut-backed Thrush *Zoothera dohertyi* is an Indonesian species found on the Lesser Sunda islands of Lombok, Sumbawa, Sumba and Flores and in west Timor. It inhabits primary forest, mist forest and woodland, and can also be found in mountainous regions up to 1,050m-2,300m (approx. 3,500ft-7,500ft) above sea level. It is said to be quite common on Flores, but rare in other areas. It is usually found living alone, with the male and female coming together only during the breeding season, which is from August-early September, especially on Flores.

I purchased my first pair of these thrushes in February 2002. I obtained the pair from Dave Armer in Preston and the following year succeeded in breeding this species. It was the first time that the Chestnut-backed Thrush had been bred in the UK. My account of the breeding along with a photo of an adult bird was published in Vol.109, No.4, pp.150-153 (2003).

It is not an easy species to sex and DNA sexing is the most reliable way of ensuring that you have a true pair. Having kept a number of pairs of this species, however, and having since 2003 bred 26 young, I believe, I can now spot slight differences between the male and female. Males, I have noticed, are more brown than chestnut on the back. Females are larger and have more white on the belly, as well as being more chestnut on the back. I have heard it said by some breeders that nestlings can differ, with males being black and females being pink, but I have never noticed this.

There were not many Chestnut-backed Thrushes in the UK in 2002. There were just a few aviculturists mostly with single unpaired birds. Apparently, Dave Campbell had brought in several pairs in 2001 and, in 2003, a small number were imported from a dealer in Germany. Through my friend Bob Jewiss, I managed to obtain a further two birds to pair with those I had already bred.

I later sold some of my birds to Bob Jewiss and also sold a pair to Jim Jerrard. The latter described his mixed fortunes breeding this species in Vol.113, No.4, p.156 (2007). One or two zoos and bird gardens had Chestnut-backed Thrushes, but were often uncertain as to the sex of their birds. Andrew Owen, when he was at Waddesdon Manor Aviary, bought two of the young I had bred, to pair with birds they had at Waddesdon. These pairings were successful and further young were bred there and a Special Interest Group was established by Andrew, who collated breeding results and put breeders in contact with each other to arrange exchanges and pair-up single birds.

Andrew is, of course, now Curator of Birds at Chester Zoo and, because of

his increased work load, has had to stand down as Coordinator of the Special Interest Group for the Chestnut-backed Thrush. The Avicultural Society Special Interest Group is now being coordinated by Jamie Graham, who is also running an ESB (European Studbook) for this species. I coordinate a similar group for the Foreign Softbill Society UK (FSSUK).

Several other collections, including Chester Zoo and the Durrell Wildlife Conservation Trust (Jersey Zoo), along with private aviculturists such as Raymond Sawyer, Phil Lewis on the Isle of Wight and Bob Jewiss, keep and breed this species. The Foreign Bird Federation (FBF) *Register of Birds Bred in the UK under Controlled Conditions*, covering the period 2005-2008, shows that six were recorded as having been bred in the UK in 2005, 21 in 2006, 48 in 2007 and 64 in 2008.

There is now a healthy population of Chestnut-backed Thrushes in the UK and it is to be hoped that this thrush will continue to be bred and a long-term self-sustaining captive-breeding population will become firmly established. There are a number of European breeders on the look-out for surplus birds. I am always getting phone calls from aviculturists wanting a male or female to make-up a new pair. It seems that every year there is a surplus of females and a shortage of males.

The Chestnut-backed Thrush spends a lot of time on the ground and, in the wild, easily blends in with the leaf-litter. It behaves not unlike a pitta, moving over the forest floor and only flying up onto a branch if it is disturbed. It is a peaceful bird by nature and can be housed with other species (though not other thrushes) even when it is breeding, so long as the aviary is large enough. For the best breeding results, however, each pair should be given an aviary to itself.

My pairs go to nest about mid-March, or sometimes earlier. I had a friend whose birds bred in January, but this is not to be recommended. I pair-up my birds in February, after having kept them apart during the winter months. I house each pair in a 9ft x 4ft x 6ft high (approx. 2.7m x 1.2m x 1.8m high) flight, with the floor covered with wood shavings. I place a nest box and a basket in each aviary. I use a parakeet nest box with part of the front cut away to turn it into a half-open-fronted nest box. This is placed high in a corner of the flight, well away from the door through which I feed the birds. A wicker basket, similar to that available from florists' shops, is fixed to the wire mesh. These are screened from view using plastic Boston Ferns, which I attach to the outside of the nest boxes and baskets. I always put the female in the breeding flight first and put the male in the flight in a show cage at the same time. However, if he is not steady enough in the show cage, I place him in an adjoining flight (space permitting). I do not let him in with the female for at least a week.

I provide coconut fibre and sisal string or jute as nesting material and put in some animal hair for finishing off lining the nest. When the pair is in breeding condition, the female sings a little song, which is not loud, but which attracts the male's attention. Usually, he then sings loudly and attempts to feed the female with livefood. I have also noticed that when the pair is in breeding condition, both the male and female's legs, which are normally an off-white/pinkish colour, turn a really bright pink.

The female usually lays a clutch of up to three eggs but on the odd occasion, may lay as many as four eggs, however, often only two of these hatch. The incubation period is 15 days. The young leave the nest after about 15-16 days, but it is several more days before they can fly and for about a week they hide among the undergrowth.

Most of the 26 young bred by Gary, who lives in South Yorkshire, here in the UK, have gone to zoos and bird gardens, with several of them having gone to the Netherlands and Belgium. E-mail:gary.bralsford@hotmail.co.uk

* * *

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Will all members please note that their subscription for 2012 will become due on January 1st. Please note that the Avicultural Society account is now at Barclays Bank, not NatWest. As the NatWest account has been closed, all future standing orders, subscriptions and other payments should be made to Barclays Bank (Burnham-on-Crouch Branch). Please quote: Account No.13296954, Sort Code 20 54 30. Please ensure you include your name as the account reference otherwise we cannot match payments. In case of difficulty please contact the Hon. Secretary and Treasurer whose details can be found on the inside of the front cover.

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CAPTIVE CARE OF THE FRIENDLY GROUND DOVE

Gallicolumba stairi IN SAMOA

by Rose Collen, Bronwyn McCulloch, David Butler
and Glen Holland

Introduction

The purpose of this project was to safeguard a number of Friendly Ground Doves (also known as the Shy Ground Dove) during an operation to remove Pacific Rats *Rattus exulans* from the Samoan islands of Nu'utele and Nu'ulua. It was thought the doves might be vulnerable to the toxins being used (Parrish, 2009). The eradication operation was managed by Dave Butler, a consultant to the South Pacific Regional Environmental Programme (SPREP). Although previous trips to the islands over an extended period had resulted in various counts ranging from no birds to just three birds, we hoped to capture 10-12 birds over a period of 10 days. One bird was caught by Richard Parrish and staff in Samoa in 2007, which gave us hope that we might be able to catch enough birds to secure the population during the poison bait drop. In the event, 26 Friendly Ground Doves were captured on Nu'utele Island and taken into captivity in two transfers, the first on July 23rd and the second on July 30th 2009. Four doves died while being held in captivity, but the remaining 22 healthy birds were released back onto Nu'utele Island on September 17th 2009, as soon as the poison baits had decomposed.

Capture

We arrived on Nu'utele late in the afternoon and while the holding cages were being assembled put up three nets shortly before it got dark, but failed to catch anything on that occasion. At first light the following morning we headed out to keep an eye on the nets. We decided to split up, with Richard Parrish watching two nets and one of the authors (G.H.) watching the other net which was some distance away. As the latter approached the net, he saw a thrush-like bird take off and as he got closer realised there was a bird in the net. It was at ground level and as he stood for a moment watching, out of the grass on the forest floor a second ground dove appeared and walked into the net. The two birds proved to be a pair and were quickly removed and placed in suspended holding cages. These were the first of 17 Friendly Ground Doves caught over a period of 24 hours. Having been so successful, we decided to pack up and head back to base with them. At our second attempt a further nine birds were captured over a period of three days. We had therefore succeeded in capturing 26 Friendly Ground Doves.



Male Friendly Ground Dove.

Captive husbandry

The post capture holding cages consisted of a row of six cages each measuring 40cm x 40 cm x 90cm (approx. 1ft 3³/₄in x 1ft 3³/₄in x 2ft 11¹/₂in) and designed to hold a single bird. The floor was 10mm (not quite 1/2in) square weldmesh and the rest of the frame consisted of No.8 wire frames covered with green shade cloth. The idea was to provide the birds with privacy but without making the cages too dark, while at the same time avoiding the possibility of birds flying against the wire and damaging their beak, cere and/or skull. As it happened, most of the cages ended up with three birds in each of them for 24 hours. Seed was placed in a wide but shallow dish and Ornithon soluble vitamin supplement was added to the drinking water which was provided in hook-on bowls. Handfuls of soft leaf litter collected from the forest floor were placed on the wire base of each cage. The day after capture when we removed the birds from the cages to transport them to the mainland, by palpating their crops it was evident that some birds had begun to feed, but others did not appear to have eaten anything.

As we had never imagined catching so many birds in such a short time, we had only eight bird bags. We quickly rallied the troops and a few T-shirts and a wrap around skirt were sacrificed for the cause and, using string and makeshift needles for sewing, these were turned into additional bird bags.



Female Friendly Ground Dove.

Once safely in the bags the birds were carefully placed on a bed of soft leaves in a large plastic container, with the lid slightly open, for the trip to the mainland in a small aluminium boat.

On arrival at Vailima Botanic Gardens, the birds were housed in large cardboard boxes in the Parks and Reserves' office. Members of the same sex were housed together in groups of two or three birds. Each box had shade cloth on the front to allow in light, a small handful of leaf litter on the floor and shallow bowls of food and water, as well as seed scattered on the floor to encourage feeding. The first group of birds captured was housed in these boxes for seven days - until work on the aviaries had been completed - and the second group was housed this way for four days.

Confining wild-caught birds this way is a proven method of reducing losses due to stress. Housing the birds in the boxes helped settle them into captivity and become accustomed to a captive diet, etc. It worked in the following ways:

1. By keeping the lights on for 24 hours on each of the first two days and food and water close by we encouraged the birds to feed on the diet provided.
2. We prevented them from flying/thrashing around and exhausting themselves as they were likely to have done in a large aviary.

Only after they had settled down and were feeding were they moved into aviaries, with two or three birds of the same sex in each flight.

Aviary set up

The aviary set up consisted of a shed with a concrete floor and concrete blocks/chicken mesh walls. Twelve internal flights were created within this structure, using timber framing covered with square mesh welded wire to rat-proof the flights and with the ceiling and walls lined with shade cloth to prevent the birds injuring themselves. A corridor, with six flights on either side, enabled each flight to be easily serviced. A light was set up in the corridor to provide a little extra light during the day, as there was very little natural light on the more shaded side of the aviary. Each flight measured approximately 0.5m wide x 2m high x 2m-3m long (1ft 8in wide x 6ft 6in high x 6ft 6in-9ft 9in long).

Each flight had a thin layer of fine gravel on the floor, covered initially with a thin layer of leaf litter to make it easier for the birds to find the seed that had been scattered on the ground. Perches were placed at a variety of heights at either end and in the middle of the flights, so that the birds had at least two to three perches to move between.

Fresh coconut palm fronds were placed at the two ends and a few fronds were attached to the sides to provide cover for the birds and avoid them flying into the ends in panic. Later, tarpaulins were put up around the outside of the aviaries to block the birds' view of people walking nearby. The doves seemed to get most stressed by movement and the tarpaulins made an immediate difference to the amount of flapping around the birds did when people were nearby.

Feeding and servicing

So as not to stress the birds unduly, the amount of time and the number of people entering the aviaries were kept to a minimum. Fortunately, we had on record an article by Dieter Rinke who had bred this species many years previously in Tonga and who referred to them being happy to eat "a seed mix suitable for Diamond Doves." The Friendly Ground Dove has a very small bill not unlike that of the Diamond Dove *Geopelia cuneata*. We offered our birds a mixture containing white and Japanese millets, buckwheat and sorghum. Twice a week the birds were given the vitamin and mineral supplement Ornithon in their drinking water at the rate of two small scoops (4g) per litre (0.22 UK gallons) of water. It was also added to the water when the birds were particularly stressed such as, for example, after being handled and moved into the aviaries.

The aviaries were cleaned regularly and any build up of faecal matter or

mould was removed. The leaf litter was replaced twice during the period of captivity and fresh leaf litter and invertebrates were provided.

The males, when captured, weighed on average 134.2g (n=6) and the females 109.4g (n=11). These figures do not include the birds that died.

Losses

A few losses were expected due to capture myopathy, or “shipping fever” as it was referred to by the vet in Samoa, but it was hoped to keep these to a maximum of 10%-15%. Three birds became sick during the first two weeks in the holding aviaries. In each case the bird was found fluffed up, it was moving around less than the other birds and was sometimes sitting on the floor of the aviary. One bird had faecal matter around its cloaca.

The sick birds were removed from the aviary and placed in the cardboard boxes in which they had previously been housed and were kept in the office with a lamp shining in day and night. Food was scattered on the floor and was also placed in a small dish and water was provided in a D-cup bowl. All three birds were crop-fed 4mls-5mls of a glucose and antibiotic solution. One that was underweight also received a liquid food supplement (ProNutra - a complete breakfast cereal formula) and a little added glucose. The bird that had faecal matter around its cloaca was carefully cleaned to prevent a blockage. Each of the sick birds died within 24 hours of being found unwell. Necropsy indicated that the first bird had a high burden of worm eggs and that all three had likely died as a result of stress and not feeding adequately. A banding (ringing) mishap on September 7th led to the death of the fourth bird.

Release

On September 7th 2009 the birds were caught using a hand net. They were checked for injuries, weighed and measured and most of the unbanded birds were banded (ringed). By midday all of the birds had been placed in cardboard cat boxes ready for transportation. Cardboard divisions were used to divide each of the boxes into four compartments and the floor was lined with a mat of brown fibrous palm material. Each compartment was just large enough for a dove to perch comfortably - probably without being able to turn around easily. The journey back to Nu’utele took approximately two hours by car and boat. On arrival back on the island each bird was removed from its box and quickly checked for injuries which may have occurred during transportation (there were none). The doves were then released from the hand into the area of forest from which most of them were captured. All flew off strongly into the canopy.

Discussion and recommendations

In terms of the size of the flights, the aviary was adequate for the temporary housing of the doves and the best use was made of the available space. However, had the birds been held in captivity for much longer, hygiene may have become an issue. Because the birds panicked so much when anyone entered the confined space, it was difficult to clean the aviaries and the need to maintain hygiene standards had to be balanced against the stress caused to the birds. For the same reason it was not possible to observe the birds closely to check for signs of aggression and whether or not they were feeding properly, etc.

If a similar project was to occur in the future, ideally each flight in the holding aviary should be larger so that vegetation can be provided amongst which the birds can hide and gain greater security and, hopefully, reduce the stress levels. The vegetation should be replaced regularly to prevent a build up of faecal matter and mould, which should not be too difficult if there is enough space in the flights for the birds to retreat to while this is happening.

Care of the birds

Others involved in the captive care of the birds were Elizabeth Kerstin and Fialelei Enoke of the Ministry of Natural Resources and the Environment and Alan Tye of the South Pacific Regional Environmental Programme.

Reference

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Rose Collen, Department of Conservation, Invercargill, New Zealand.
E-mail:rcollen@doc.govt.nz

Bronwyn McCulloch, Threatened Species Team, Healesville Sanctuary.
E-mail:bronwynmcculloch@hotmail.com

David Butler, SPREP consultant. E-mail:d.butler@xtra.co.nz

Glen Holland, Director, Healesville Sanctuary. E-mail:Glen-nat@hotmail.com

* * *

WARNING TO PIGEON FANCIERS

A paramyxovirus (it is not bird flu) not previously reported in Australia has been detected by the authorities in Victoria among birds belonging to pigeon fanciers near Shepparton and in the north-western suburbs of Melbourne.

A high rate of mortality has been recorded among infected flocks. Strains of paramyxovirus are generally capable of infecting other avian species, but at this stage the disease has only been detected in pigeons.

HAND-REARING A GREAT BLUE TURACO *Corythaeola cristata* AT PARADISE PARK, HAYLE, CORNWALL

by Rebecca Waite

Introduction and background

The Great Blue Turaco *Corythaeola cristata* is the largest member of the turaco family. It measures between 70cm-75cm (approx. 2ft 3in-2ft 6in) in length and weighs between 820g-1,250g. It has a stout body with quite short and rounded wings and a long tail. The plumage is predominantly blue.



David Woolcock

Young Great Blue Turaco aged 83 days.

Both sexes look identical in coloration and this remains so throughout the year. This species lives in sub-Saharan Africa, where it inhabits montane rainforest and gallery forest (forest bordering rivers and streams) from sea level up to about 2,700m (approx. 8,800ft). It feeds mainly on fruits, but

also favours leaves, shoots and flowers.

The pair of Great Blue Turacos at Paradise Park have been together since February 2010. Almost from the moment they met they have displayed and called to each other and now have a very strong pair bond. As soon as we provided them with a nesting place they began to gather flimsy sticks and broad-leafed plants to build a nest.

We tried several different types of nesting places, all of them large platforms with a raised edge or lip to prevent twigs falling off and with various types of nesting substrate, such as wood shavings, sand and hessian sacking. The birds would build a nest and the female would even occasionally lay on these platforms, but after a few days the birds would abandon the eggs. It was thought that the nests they were building were too flimsy and were falling apart. We then managed to purchase some very large wicker baskets one of which we placed in the same area on the existing platform inside the shelter and we placed another basket outside in a sheltered position. The birds took to these very quickly and even if the flimsy nest consisted of only a handful of twigs they would happily sit on it, lay eggs and incubate them.

The first clutch of two eggs was abandoned only three to four days before the eggs were due to hatch. On inspection, the eggs were found to be fully formed and contained what looked to be healthy chicks. The birds laid a second clutch, both eggs of which were fertile, but the same thing happened again. The next clutch of eggs that was laid was removed after the second egg was laid and the eggs were artificially incubated in a Grumbach incubator. One of the eggs proved to be infertile, but the other egg was fertile and the moment the external pip began, the egg was placed under a brooding pair of White-cheeked Turacos *Tauraco leucotis*. We had successfully used this pair of turacos as foster parents many times before to rear other turaco chicks. Initially the pair seemed to be rearing the chick successfully, but by the sixth day it had died. It is thought that the size of the rapidly growing chick and its demand for food, were just too much for the foster parents, who simply could not keep up with it.

Following this set back we again gave the Great Blue Turacos the opportunity to incubate their own eggs and rear the young themselves, in the hope that they just needed more practise in doing this. Finally, in late 2010, our first chick hatched under the female turaco. This breeding attempt was monitored via cameras which we had set up to observe the nest without needing to disturb the turacos. We could easily observe the nest and see exactly what was happening. The female seemed very attentive and appeared to be trying to feed the chick. The following day, however, it was obvious that something was wrong. The chick was not responding to the female's attempts to encourage it to feed and after viewing this on the monitor it was

*David Woolcock*

The female sitting on the nest in a large wicker basket on the platform inside the shelter.

decided to go in and investigate. Upon closer investigation, we discovered that, unfortunately, the chick had died.

Reluctantly we all agreed that hand-rearing was our most realistic option and despite the difficulties we were likely to encounter, thought we had little to lose. Before embarking on a hand-rearing attempt, we carefully researched all available protocols for hand-rearing this species and after careful consideration decided to adopt the protocol developed at San Diego Zoo in California. We already had good links with staff there, namely Pat Witman and Clancy Hall, and I, together with a colleague at Paradise Park, had been fortunate enough to visit the zoo in November 2009. I had seen how its turacos are kept and the diets that are used for hand-rearing these birds, although it was made clear to us that the zoo's protocol was only partially successful.

During the winter months all our turacos are locked in their heated shelters overnight. Because of the extremely cold and prolonged winter in 2010, we took the decision to prevent the female from continuing to lay and thereby risk egg binding, by shutting the male and female in separate shelters at night and allowing them individual access to the main enclosure during the day, with each bird taking turns outside. Once winter had almost passed, they were once again let out into the main enclosure together during the day (whilst still being locked away at night for extra warmth). They immediately began calling and copulation was frequently observed. Within days the female laid an egg in her shelter. This egg was removed for artificial incubation.



David Woolcock

Day seven.



David Woolcock

Day 13.



David Woolcock

The author feeding the chick on day 22.



David Woolcock

Day 22.

Hand-rearing

The egg was placed in the Grumbach incubator which was used to incubate the previous eggs and, on February 9th 2011, the internal pip began. It was followed a day later by the external pip and then finally on the morning of February 11th the chick had hatched. It weighed 37.14g. We then followed the hand-rearing protocol given to us by staff at San Diego Zoo and used it as a guide to what to feed the chick and when. This protocol had been used to successfully rear chicks there in 2000, 2001 and 2003 but, unfortunately, since then it had not been successful.

After the chick hatched we waited six hours for the begging response to begin before feeding it. We gave it only a Dioralyte solution for the first two feeds (using a syringe), then a mixture of Kaytee Rainbox Exact parrot food soaked in a Dioralyte solution until it was completely hydrated and soft. This can be kept refrigerated for 24 hours before being discarded. However, I always placed the food in a metal dish sitting in warm water to take the chill off the food before feeding it to the chick. I used a pair of tweezers and tore off small chunks of Kaytee to feed to the chick, which took it readily. I always removed the chick from the bowl in the brooder (see below) when feeding it, as it was easier to feed it on a flat surface. I would feed the chick until it no longer wanted any more food. I was very surprised by the amount of food such a small chick consumed at one sitting. On the first day it did not produce any faeces even though we stimulated the cloaca. The first faeces were passed on the second day. It was necessary to stimulate the cloaca only until the third day after which, without any stimulation, the chick would defecate after every meal. The chick's weight was recorded before the first meal each day and checked against the corresponding weight recorded at San Diego Zoo.

The temperature in the brooder was initially set at 36°C (96.8°F) and then decreased by 1°C (~0.6°F) every other day. The humidity was maintained at approximately 65%-75%. The chick was fed every two hours from 06.30hrs-20.30hrs (8.30pm). It was kept in a metal 'coop cup' bowl with a small piece of Astroturf on the bottom to help the feet develop properly and was surrounded with paper towelling which supported the chick and kept it away from the sides of the metal bowl and prevented it from becoming chilled. Using this method meant that the matting and towelling could be changed regularly and the chick kept clean.

For three consecutive days, beginning on the second day, Betamox palatable drops were given once a day as a prophylactic, in case any infection had been picked up during hatching. By the sixth day the pin-feathers on the wings were beginning to develop and the chick became impatient if it was not fed as soon as it was taken out of the brooder. It would actively try to

move towards the bowl containing the food and the tweezers to encourage me to speed up. At this stage the chick's weight was higher than that of those of the same age successfully hand-raised at San Diego Zoo and this continued to be the trend until the chick was about 30 days old, when its weight began to even out and become similar to that of those raised at San Diego Zoo.

On the eighth day very small pieces of soft, steamed broccoli, dipped in the Dioralyte solution were given to the chick towards the end of each feed of Kaytee. The chick seemed to enjoy this so much that by day 12, I had to begin feeding it the colourful Kaytee first and leave any green bits of Kaytee until last, along with the broccoli. If I fed it green Kaytee first this was the only colour food it would eat, presumably thinking that it could be broccoli - which it loved so much.

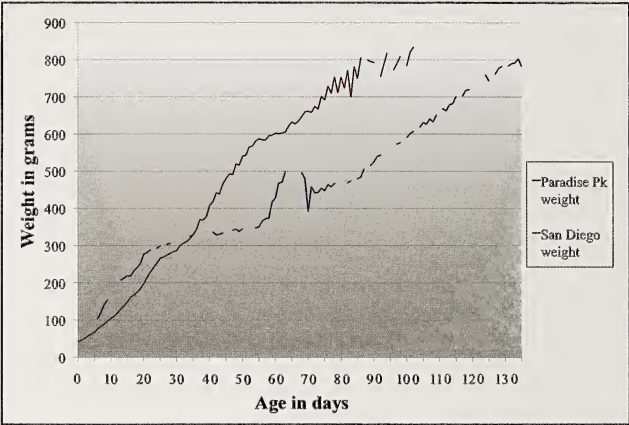
On day 10 the Dioralyte solution was discontinued and the Kaytee was instead soaked in boiled water that had been allowed to cool and the chick was given access to sunlight for about 15 minutes each day. Day 12 the chick was observed flapping its wings and beginning to preen itself. At this point the chick was moved to a flat bowl (with the Astroturf and paper towelling) so that it could stretch its wings more easily.

On day 14 the feeds were cut down to every two-and-a-half hours from 06.30hrs-20.30hrs (8.30pm). The diet was also changed slightly with small pieces of chopped papaya and banana (also moistened in water) being added to it. As with the broccoli, these new additions to the diet were fed to the chick after it had consumed the Kaytee and indeed also after the broccoli. After a day or so I also had to avoid until last, feeding it yellow and orange pieces of Kaytee - as well as pieces of green Kaytee - as it would not eat the other coloured pieces once it had eaten these, again presuming they were banana and papaya.

From day 16 a dish of water and a dish containing some food were left in the brooder with the chick between feeds. The young turaco was standing well by itself by now. By day 17 it was seen eating small amounts of broccoli taken from the dish and on day 18 was seen eating small amounts of banana and papaya. From day 17 it was fed every three hours from 06.30hrs-20.30hrs (8.30pm) and was seen attempting to perch on the edge of the food dish. So, on day 18, perching was placed in the brooder.

From days 21/22 the young turaco vocalised when I entered the room to feed it. By day 22 the nest bowl was removed as it was no longer being used. On day 25 the amount of broccoli, banana and papaya was increased and the Kaytee was not soaked as much, so that it was less sloppy, and was generally fed to the young turaco in large pieces. It was quickly outgrowing the brooder, so was moved to a larger brooder on day 27.

Fig. 1. Comparison of growth rates of Great Blue Turaco chick at Paradise Park and those at San Diego Zoo.



Day 41.

David Woolcock



David Woolcock

Taken on July 6th 2011, this photo shows the young turaco at 140/141 days of age.
All that is lacking is the orange-red tip to the bill.

From day 28 the young turaco was fed every four hours from 07.00hrs-18.30hrs (6.30pm). On day 32, figs were introduced into the diet and were readily taken. The following day feeds were cut down to every five hours from 07.30hrs-18.00hrs (6.00pm).

On day 36 the turaco was moved to an indoor pen with perching and

a heat lamp during the day, so that it could stretch its wings and begin to try exploring its environment (each night it was returned to the brooder). Newspaper was used on the floor in preference to wood shavings, as there was a potential risk of the young turaco consuming the shavings. Straight perches were used to limit the risk of the bird becoming caught in a fork of a branch.

By now the turaco was mostly feeding independently or with just a little coaxing. On day 45, apple, pear, melon, grapes, blueberries, softbill Kaytee and a low iron insectile mixture were added to the food bowl which was left in the enclosure. This was similar to the adult diet and the young turaco seemed to enjoy the added fruits. Kaytee Rainbow Exact continued to be provided as the young turaco continued to consume a large amount of this.

The young turaco was later moved to a large outdoor enclosure during the day and was locked away in a heated shelter at night. The young turaco continued to be weighed each morning to ensure that it was gaining sufficient weight. By now it weighed about 100g less than the average weight of a comparable young turaco at San Diego Zoo, but continued to eat well and with the added exercise it was getting in the outdoor enclosure, began putting on weight faster.

On the morning of day 69 I noticed that the young turaco had eaten very little since the previous night and had lost 16g in weight since the previous morning. Occasionally the young turaco's weight had fluctuated for a day or so before it began to gain weight once again, but that morning something did not seem quite right. The young turaco looked fine but was not interested in food, which was extremely unusual as it had always eaten something no matter how full it seemed to be. I monitored its condition throughout the morning. The young turaco took a small amount of food, but not even favourite items such as broccoli and the large orange pieces of parrot Kaytee would tempt it to eat very much. A few times I also observed it drinking water and it was unusual to see it choosing water in preference to food. After consulting the park's Curator who had also been monitoring the young turaco during its development, the vet was called in. The vet agreed that something was not quite right. The young turaco was slightly fluffed-up by now and had sleepy-looking eyes, something I had never observed with this bird before. It was given an injection of Doxycycline and put on a course of Marbocyl tablets. During that one day it had lost over 90g in weight and by the end of the day was passing only very watery faeces.

The next morning, with some trepidation, we went to see how the bird was. To our delight, it was fine. It was almost back to its old self and was eating lots of food and its weight had remained unchanged overnight.

Since then the young Great Blue Turaco has continued to thrive and

slowly regained the lost weight. At the time of writing (May 2011), the young Great Blue Turaco is 90 days old and weighs 516g, which is about 200g less than the San Diego birds. However, it is very fit, it is boisterous and is a strong flier, whose adult plumage is almost complete. A DNA test has shown that it is a female. Since losing weight she has only been given apple, pear, banana, papaya, blueberries and two new favourites, strawberries and raspberries. I am hoping to reintroduce the low iron insectile mix and Softbill Kaytee in the next few weeks, once I am sure she will continue to gain weight.

Even though this is one of the most challenging species we have reared here at Paradise Park, it has been worth every minute and I have found it extremely rewarding.

Acknowledgements

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Products mentioned in the text

Betamox: palatable drops produced by Norbrook Laboratories Limited, Station Works, Newry, Co. Down BT35 6JP, Northern Ireland.

Dioralyte: Sanofi-aventis, One Onslow Street, Guildford, Surrey, GU1 4YS, UK.

Doxycycline: Shellmed UK, Loughrea, County Galway, Ireland.

Kaytee Rainbow Exact & Softbill Kayee: Kaytee Products, Inc., 521 Clay Street, Chilton, WI 53014, USA.

Low Iron Insectile Mix: Orlux, Versele Laga NV, Kappellestraat 70, B-9800, Deize, Belgium.

Marbocyl: Vetoquil UK Ltd, Vetoquil House, Great Slade, Buckinghamshire Industrial Park, Buckinghamshire MK18 IPA, UK.

Rebecca Waite can be contacted at Paradise Park, Hayle, Cornwall TR27 4HB, UK. Website: www.paradisepark.org.uk

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2012 SPRING SOCIAL MEETING

The Avicultural Society is planning to visit Chester Zoo on Saturday May 12th. However, the arrangements have yet to be finalised.

THE SOUTHERN CRESTED CARACARA *Caracara plancus*, INCLUDING ITS BREEDING AT WELTVOGELPARK WALSRODE

by Simon Bruslund and Lech Bretschek

The Common or Crested Caracara (formerly *Polyborus plancus*) has been split into two species which have been named the Northern Crested Caracara or simply the Crested Caracara *Caracara cheriway* and the Southern Crested Caracara or simply the Southern Caracara *C. plancus*.



João Marcos Rosa/Weltvogelpark

Adult Southern Crested Caracara. There is no obvious visual difference between the male and female.



Jessica Rumpel/ Weltvogelpark

The two chicks that were hand-reared. They are four days old.

Changes in the taxonomy of the caracaras have included changing the name of the genus from *Polyborus* to *Caracara* and this is a common and justified cause of confusion, as this change has not yet been fully implemented on all applicable databases, including the record keeping databases of ISIS and the recent CITES Appendixes, where the species is listed in Appendix II/B.

For this reason the Southern Crested Caracara has several synonyms and there is some confusion regarding its correct identification. Not least, because both caracaras look very similar to each other and zoos which keep them often do not know the precise origin of their birds and, it can be assumed, that many are wrongly labelled. A particular challenge in future breeding efforts will be to keep the two forms separate.

A convincing and thorough review of museum specimens by Dove and Banks, published in a scientific paper in 1999, concluded that the northern and southern populations of the Crested Caracara should better be considered separate species. As well as an analysis of their measurements and behaviour, they provided a practical key to the identification of each form. The chest of the northern forms is more spotted and that of the southern form is barred, but the most obvious difference is that the northern forms have a pale patch

on the belly between the legs and in the southern form this area is dark. Furthermore, there is pale barring on the lower back of the southern form and in the northern populations the lower back is black. There seems to be a narrow area in the northern part of South America where the two species meet or even intergrade. Essentially, however, the Amazon River is the border between the two. The study has yet to be followed up with genetic investigations.

Thanks possibly to their high level of adaptability, the Northern and Southern Crested Caracaras are quite abundant in the wild and neither of them is currently considered to be endangered (although in Florida the local population of the Northern Crested Caracara is considered to be threatened). A third closely related species, the Guadalupe Caracara *C. lutosa*, is extinct. It was last seen in 1900, having been persecuted and eventually exterminated by the human population of this island off Baja California (Mexico). The Caribbean region was home to some far more ancient caracaras, fossil remains having been found of what appear to have been terrestrial-living caracaras, which may even, have been flightless.

Weltvogelpark Walsrode

At Weltvogelpark Walsrode our original Southern Caracaras, consisting of a single female and a pair from Berlin Zoo, initially proved to be rather difficult to pair up. All attempts to pair the younger male with the second female failed and finally the two birds from Berlin ended up forming a harmonic, but still for some time, non-breeding pair.

It was not until 2010 that the two finally bred. In the cold, early days of April, the birds were for the first time observed carrying nesting material in their enclosure which they were sharing with an Andean Condor *Vultur gryphus*. The pair was offered a nesting basket measuring 45cm (approx. 1ft 6in) in diameter, which was placed 4m (approx. 13ft) above the ground in a corner of the aviary where the condor could pose no danger. The basket was readily accepted by the pair. Unlike their closest relatives the falcons, which make only a shallow, unlined scrape in the ground or use the old nest of another species, caracaras build a stocky nest of sticks and dried grass. By the beginning of May the pair at Weltvogelpark Walsrode had completed a voluminous nest and the female had begun sitting, but frequently left the nest if there was the slightest disturbance. The male was frequently observed at the nest, but did not sit and instead restricted his behaviour to closely monitoring the surroundings and frequently and loudly proclaimed his hold on the territory. During incubation the pair seemed to become increasingly aggressive towards the neighbouring birds and, occasionally even attacked the mesh, if any bird came too close. As we are not sure exactly when

incubation began, we are unable to document the exact incubation period. It was on May 26th that two chicks hatched just a short interval apart and developed well in the care of their parents. The regular nest inspections did not seem to cause excessive stress to either the chicks or the parents.

After adding only a little more material to the nest and with very warm spring weather compared to the previous year, the pair began breeding much earlier this year. Also, in comparison to the previous year, the pair proved to have become significantly bolder and more aggressive towards the keepers, as well as other birds and, caused considerable stress to the birds of prey in the neighbouring aviaries, which they even attempted to grab through the mesh.

For this reason it was decided to intervene and move the breeding pair from the exhibition aviaries to one of the off-exhibit breeding areas of the park. The two chicks had to be removed and were placed in a brooder. Around about the ninth day they were fitted with 11mm sized closed leg-bands. Hand-rearing the chicks - which were kept on rough bedding to ensure proper growth of their long legs - proved to be straightforward. The two are being kept together while they are growing up in order to achieve a reasonable degree of socialization.

Behaviour and feeding

The behaviour of the caracaras is rather unusual for birds of prey and particularly for relatives of the falcons. Among the first thing most observers notice is their high level of activity. Caracaras are very active and move around a great deal investigating their surroundings. They also indulge in noisy awkward-looking displays in which the calling bird throws its head back until it almost touches its shoulders. They are also unusual in that they spend a large amount of time on the ground - they can fly well but often seem to prefer to walk. This suits their generalist hunting strategy: they will eat almost anything and even scratch around in the soil and beneath stones and branches looking for invertebrates. They eat mainly carrion and even over ripe fruits and berries. They will search amongst the faeces of large carnivores looking for anything remotely edible and remove ticks from the backs of large herbivorous mammals. Caracaras are capable of hunting and will pursue rodents and reptiles and wait patiently for them to re-emerge from their burrows/hiding places. They will also follow other birds, swarming ants, hoofstock, vehicles and humans, in the hope of picking up a meal. In urban areas caracaras will often wait for the trash to be brought out. At Weltvogelpark Walsrode, the diet of our Southern Crested Caracaras is not quite as varied as in the wild, but visitors may occasionally see unusual items of food, such as fish or fruit, in their aviary.



Jessica Rumpel/Weltvogelpark

Aged approximately 45 days old, shortly after fledging. By the second year the Southern Crested Caracara continues to show obvious signs of juvenile plumage, but the legs and feet have changed from pale blue to a whitish or pale yellow colour.

The crested caracaras have a low stress threshold when it comes to contact with other species, so it is surprising to learn that allopreening behaviour has been observed between a Southern Crested Caracara and a Black Vulture *Coragyps atratus* in the wild in the Brazilian Pantanal. In aviaries this behaviour can prove a rather stressful experience for other even much larger birds.



Jessica Rumpel/Weltvogelpark

The parents and one of the offspring at the nest.

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- Southern Crested Caracara:<http://en.wikipedia.org/w/index.php?oldid=415935418>

Weltvogelpark Walsrode is in northern Germany. Website: www.weltvogelpark.de

THE MALAY OR BUFFY FISH OWL *Ketupa ketupu*

by Peter Stocks

The Malay or Buffy Fish Owl *Ketupa ketupu*, as it is now called, is one of four species of Asian fish owls - the others being Blakiston's Fish Owl *K. blakistoni*, the Brown Fish Owl *K. zeylonensis* and the Tawny Fish Owl *K. flavipes* - which having previously been reclassified and included in the genus *Bubo* with the eagle-owls, are now to be found back in the genus *Ketupa*.

Currently four subspecies of the Malay or Buffy Fish Owl are recognised: *K. k. aagaardi* found from southern Assam to southern Thailand and Vietnam; *K. k. ketupu* found on the Malay Peninsula, Riau Archipelago, Sumatra, Java, Bali, Borneo and Bangka; *K. k. minor* found on Nias Island (off north-west Sumatra); and *K. k. pageli* found in north-west Borneo (Clements, 2007). Size-wise this species measures somewhere between 15in-18½in (approx. 38cm-47cm) in length and on average weighs about 2lb 8oz (1.3kg), meaning that it is only marginally larger than the Tawny Owl *Strix aluco*, but some two-and-a-half to three times heavier. The female is always larger than the male, with weights of 1kg-2kg (approx. 2lb 2oz-4lb 4oz) having been recorded.

These birds seem to have the ability to flatten their ear tufts and sink their head down between their shoulders, giving them what many would describe as a fierce and frowny-type look.

The Malay or Buffy Fish Owl tends to be a bird primarily of lowland and coastal areas, but has been recorded living at as high as 5,300ft (approx. 1,600m) on Mount Singgalang on Sumatra. It also seems capable of living adjacent to paddy fields, provided there are plenty of trees and other vegetation, amongst which it can seek seclusion during the day, when it is apparently to be found roosting singly, though not too far from other roosting birds.

The habitat needs to provide a predominately fish diet along with a smaller proportion of reptiles, frogs, toads and crabs, etc. Rats, mice and some larger insects, such as beetles, though readily eaten do not form a great part of the diet. Because of the relatively small amounts of fur and feathers in its diet, the fish owl does not cast pellets of the same firmness or consistency as most other owls, and instead casts any bones or other remains directly below its roost or feeding site.

Nesting seems to be quite a simple affair, with the birds using a cavity in a tree or perhaps taking over the abandoned nest of a raptor (something similar in structure to the nest of a Magpie *Pica pica*), in which the female lays a single egg measuring on average 52mm x 48mm. In Boyer & Hume

(1991) the egg is described as being white with dusky spots, though I have yet to visit The Natural History Museum at Tring to confirm this. If this is the case, I wonder if the eggs of the other three fish owls are similarly marked!

This owl was first bred in the UK at London Zoo in 1967 and an account of the breeding was published in the *Avicultural Magazine* Vol.74, No.1, pp.17-18 (1968). One of the pair had come from John Spedan Lewis's collection at Leckford in 1945. Its age was unknown, but it was presumed that it had been living there for some time before the outbreak of war in 1939, so may have been more than 30 years of age. The other bird had been presented to the zoo by Dr K. C. Searle in 1954. According to the *FBF Register of Birds Bred in the UK under Controlled Conditions*, covering the period 2005-2008, the last recorded breeding of this species was in 2002 (when one was reared). The Brown Fish Owl was first bred in the UK at Paignton Zoo in 1985.

Should anyone be fortunate enough to acquire a pair of these beautiful birds, I believe they would do well in a relatively secluded aviary, probably in the region of 8ft x 12ft-16ft x 8ft high (approx. 2.4m x 3.6m-4.8m x 2.4m high). I would provide an open-fronted nest box roughly 1ft 6in x 1ft 6in x 1ft 6in high (45cm x 45cm x 45cm high) and a tray 1ft 6in x 1ft 6in x 4in deep (approx. 45cm x 45cm x 10cm deep), both with a substrate of 50% wood shavings mixed with 50% peat to prevent the egg from rolling around and perhaps getting broken.

Their diet would, because of its high fish content in the wild, need to reflect this and contain plenty of protein. So, if the keeper is unable to provide fish, such as sprats and whitebait, etc., or if the birds will not accept these, a feeding regime of day-old chicks, mice and rats, should be enhanced with a suitable supplement or supplements.

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Peter Stocks is the Hon. Secretary and Treasurer of the Avicultural Society. His contact details can be found on the inside of the front cover of the magazine.

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Chris Dunn - E-mail:chrisdunn1987@hotmail.co.uk/Tel:07413 522485

Seed-eating pigeons and doves

Philip Schofield - E-mail:p.schofield@dorsetcc.gov.uk/Tel:01305 264361

Snowy-crowned Robin-Chat *Cossypha niveicapilla*

Barry Woodley - E-mail:andrea.woodley@btinternet.com

Sumatran Laughingthrush *Garrulax bicolor*

Andrew Owen - E-mail:a.owen@chesterzoo.org

Toucans, toucanets and araçaris

John Ellis - E-mail:John.ellis@zsl.org/Tel:0207 4496436

White-rumped Shama *Copsychus malabaricus*, Magpie Robin *C. saularis*
and mockingbirds *Mimus* spp.

Bob Jewiss - E-mail:bobbyjewiss@blueyonder.co.uk/Tel:07545 958693

THE SOCIETY'S SPECIAL INTEREST GROUPS

by Malcolm Ellis

The idea of Special Interest Groups - groups of keepers and breeders of particular species or families of birds, each with a coordinator to put the keepers and breeders in contact with one another to exchange information and birds; with the aim of forming the maximum possible number of unrelated breeding pairs and establishing self-sustaining captive-breeding populations - was first suggested by Andrew Owen and supported by, if I remember rightly, other members such as Geoff Masson and Nigel Hewston who were present at the Avicultural Society meeting held at Waddesdon Manor on March 31st 2007. With the EU (European Union) ban on the importation of birds about to become permanent, it was vital to establish self-sustaining populations of as many different species as possible, and the idea received the unanimous support of the Avicultural Society. Within a few weeks Andrew produced a list of Special Interest Groups and coordinators, which he forwarded to me for publication in the magazine (see the inside back cover of Vol.113, No.1, 2007). I also arranged for the list to be posted on the society's website (www.avisoc.co.uk) and sent copies of it to the Foreign Bird League (FBL) and the weekly publication *Cage & Aviary Birds* (at the time published by IPC Media and published now by the Kelsey Publishing Group).

Andrew was rather disappointed by the initial response (as were, I think, many of the other coordinators). Andrew heard from only one person regarding the Fairy Bluebird *Irena puella* and, more surprisingly, did not hear from any keepers of the Chestnut-backed Thrush *Zoothera dohertyi*. He was contacted by a few laughingthrush keepers and through his own enquiries and word of mouth, succeeded in locating about 250 laughingthrushes of some 23 species. Andrew was concerned that a lot of the birds had not been DNA sexed and urged all those with species which are not sexually dimorphic, to get their birds sexed. Towards the end of 2009, the total number of species remained at 23, but the number of laughingthrushes had been revised upwards and the known population was put at 459 birds.

In 2009, the groups received a welcome boost and considerable publicity amongst the wider bird keeping fraternity, when Nick West of *Cage & Aviary Birds* interviewed the various coordinators and based on these interviews, wrote a series of articles featuring each of the Special Interest Groups in turn. I am sure members will find these articles of great interest if we can get permission to reproduce them in the magazine. Nick wrote not just about the importance of the Special Interest Groups succeeding in establishing self-sustaining captive-breeding populations and how this might be achieved, but

also touched upon the careers of the coordinators. I learned, for example, that John Ellis got his first job aged 16 working at Chester Zoo and went on to work with birds in the USA, France and Jersey, and left Chessington Zoo for London Zoo (where he is now Senior Curator of Higher Vertebrates at both London and Whipsnade) in 2000. John continues to coordinate the Special Interest Group for toucans, toucanets and araçaris, as well as having recently taken over the society's website and established our presence on Facebook. Geoff Masson, Livestock Manager at Paultons Park, previously worked at Dudley Zoo and Twycross Zoo and Laura Gardner, Curator of Birds at Leeds Castle Aviary, whose interest in the Blue-crowned Laughingthrush *Dryonastes courtoisi* has taken her to China, previously worked at the zoo in Jersey (what is now the Durrell Wildlife Conservation Trust) and Birdworld, near Farnham, Surrey. Not all of the coordinators are members of the zoo community - another of the coordinators is a Post Office manager living in Kent and another has for many years worked for DEFRA's (the Department for Environment, Food & Rural Affairs') State Veterinary Service.

On the day the first article appeared (and before I had a chance to read it) I received a phone call from a keeper who has bred Pekin Robins *Leiothrix lutea* and Silver-eared Mesias *L. argentauris*, who asked what I needed to know about breeding these? Later I received a call from a lady looking for a mate for her Snowy-crowned Robin-Chat *Cossypha niveicapilla*, a man breeding Violet Turacos *Musophaga violacea* and Emerald Doves *Chalcophaps indica* and a caller seeking a male Toco Toucan *Ramphastos toco*. He had a female but had lost his previous male with iron storage disease. I hope he got the diet right before he managed to find a new male. I also got a phone call from Dick Jaquest, who was trying to locate a female Lilac-breasted Roller *Coracias caudatus*. He was obviously successful because at our recent gathering at Paultons Park he told me he has bred nine, all of them parent-reared and has written an article about breeding this species and taken some wonderful photographs.

There have been a few changes since the original list of Special Interest Groups was drawn-up. Early on Philip Schofield came on board and took on the Special Interest Group for seed-eating pigeons and doves and more recently Chris Dunn offered to set up a Special Interest Group for the keepers and breeders of Pekin Robins. Because of his increased responsibilities on becoming Curator of Birds at Chester Zoo, Andrew Owen is no longer so heavily involved with the Special Interest Groups. He will, however, run the group for the Sumatran Laughingthrush *Garrulax bicolor*, for which he is also European Studbook (ESB) holder. The Special Interest Group for the laughingthrushes (except for the Blue-crowned and Sumatran) is now in the hands of Ian Edmans, Curator of Birds at The Rothschild

Collection, Waddesdon Manor, and Simon Matthews, Senior Aviary Keeper at Waddesdon. Ian fears for the long-term survival of many of the species of laughingthrushes in UK collections. In some cases because of the low numbers remaining and in other cases because although there are more birds, the populations are ageing, with few young birds being bred.

Ian and Simon are also jointly coordinating the Special Interest Group for the Fairy Bluebird. It is now an EAZA (European Association of Zoos and Aquaria) monitored species and, Ian believes, that the captive population should be safe. There are an increasing number of private breeders keeping this species here in the UK, as well as in Europe, where it is now bred regularly in increasing numbers. Ian believes there is little point in continuing with the niltava groups, as there are now only three holders of Rufous-bellied Niltavas *Niltava sundara* in the UK. He fears that unless this species has a couple of good breeding seasons soon, it may well disappear from UK aviculture.

Jamie Graham, Corncrake Release Programme Manager and Deputy Team Leader, HUB/Park Birds, ZSL Whipsnade Zoo and European Studbook (ESB) holder for the Chestnut-backed Thrush, has agreed to continue to act as coordinator of the Avicultural Society Special Interest Group for this increasingly widely kept Indonesian species.

There are, of course, quite a number of species and families missing from the list - the Orange-headed Thrush *Z. citrina*, some of the other thrushes and the majority of seed-eating species, for instance, are all missing from the list, as are the Lilac-breasted Roller and Blue-bellied Roller *C. cyanogaster*. This is not the result of an oversight, but because nobody has come forward and offered to act as a coordinator for these species. At the recent Council Meeting we discussed the possibility of setting up a Special Interest Group for waders (Avocet *Recurvirostra avosetta* and plovers/lapwings, etc.), but cannot take this forward until we can find someone willing to coordinate such a group. Members of the turaco family we tend to leave to the International Turaco Society (ITS) and other groups such as waterfowl, pheasants, parrots, owls and birds of prey, are better taken care of by the various specialist societies.

It would be pleasing to be able to say that the Special Interest Groups have been a great success, but while coordinators have been able to put a number of breeders looking for a spare male or female in touch with one another, there is no denying that the response has been disappointing. As our previous Hon. Secretary and Treasurer Paul Boulden pointed out to me, breeders tend to turn to the Special Interest Groups only when they need a bird to make up a pair and have been unable to obtain it from their usual contacts. Also, I think it should not be forgotten that in the case of many of

these species, there are not as many birds about as there used to be - or we may imagine there are.

The formation of the Special Interest Groups remains a great idea and such groups are crucial if we are going to build-up healthy, self-sustaining captive-breeding populations of as many species as possible. However, if they are to succeed and achieve their full potential it is vital that everybody gives them their fullest support. This should begin with all those who keep species for which there are Special Interest Groups, contacting the appropriate coordinator or coordinators and letting them know which species they keep, how many and of which sex, and the number they breed each year. This information will, of course, remain strictly confidential and will not be disclosed without the breeder's permission.

If there is a species or group of birds for which you feel you would like to set up a Special Interest Group and act as the coordinator, we would be pleased to hear from you. There is, of course, no reason why these groups should not eventually become European (rather than UK) Special Interest Groups. There are lots of interesting birds being bred in Europe.

Hopefully, breeders will be persuaded to write describing their successfully breeding methods and this information can be collated and used to come up with successful breeding protocols.

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BREEDING LAYARD'S BLACK-HEADED WEAVER

In Vol.113, No.3, pp.119-121 (2007), Graham Thurlow described breeding Layard's Black-headed Weaver *Ploceus cucullatus nigriceps* (although some recent field guides use the name *P. c. paroptus* rather than *P. c. nigriceps*, regarding the latter as being restricted to areas south of Tanzania). It is a distinctive subspecies, but because the "Spotted-backed Weaver *Ploceus cucullatus*" was first bred at London Zoo as long ago as 1862 and the Rufous-necked or Village Weaver *P. c. cucullatus* was bred there in the 1950s, a note was not included at the end of Graham's account suggesting that it might be the first breeding in the UK of this subspecies - which Dave Coles believes it is. If anyone knows of a previous breeding of this subspecies in the UK please will they inform the Hon. Secretary.

THE IMPORTANCE OF RECORD KEEPING IN AVICULTURE

by Simon Matthews

Since their earliest days, zoos and other public collections have kept records of the birds housed in their collections, an example being London Zoo's (The Zoological Society of London's) Daily Occurrences Books recording arrivals, births and deaths, its card index system and, in 1927, to mark its centenary, G. Carmichael Low's Vertebrate List, a large volume listing every species that had ever been kept in the collection. The records kept by many zoos were very basic and often recorded only the names of the species that were kept - some zoos kept barely any records at all. Today, however, all public collections have to have a well organised record keeping system and larger collections usually require one or more registrars to enable them to fulfil the requirements of current legislation.

Before the EU (European Union) import ban, captive populations could be maintained by the addition of freshly imported birds/fresh blood (new genetically diverse individuals) coming in from the wild and helping to maintain the numbers of some of these populations. However, without the input of fresh stock from the wild, aviculturists have no alternative but to work with the birds we already have and this is why it is so important that we keep records of each individual bird we have in our collections.

There are two main ways of keeping records: they can be kept on paper or electronically. Each of these methods have pros and cons. Paper records are the cheapest and easiest to keep. Anybody can keep simple written records, with minimal start-up costs. Electronic records require access to a computer and, so, are initially more expensive and the record keeper will need some sort of training on how to input the data. However, large amounts of data can be stored on a computer and this takes up very little space, as opposed to storing large amounts of paper. Typed computer records can be read by anyone, whereas the handwriting of some people can be difficult to read. Both paper and electronic records can be lost or destroyed, but electronic records can easily be copied and backed-up, whereas paper copies take up more space.

Most public collections keep their records on an electronic database of some description, which may be a spreadsheet or a record keeping programme. Most zoos, especially the larger ones, use a piece of software called ARKS (Animal Record Keeping System). This was developed by ISIS (International Species Information System) and is run by ISIS. ARKS allows users to keep detailed records of specimens in their collections,

including everything from the hatch date and parentage to bill length and weight. The programme can also be used to gather information from different individuals, on the same or different species, and it is a great tool for gathering research and for being able to use the data that has been input when writing articles, etc. ARKS is, however, slowly being phased out and most users are transferring to ZIMS (Zoo Information Management System). This new programme, which some UK zoos are already using, will bring together all the ISIS programmes in one programme, which includes the veterinary and studbook software, which they already offer. ZIMS will also be a lot more flexible regarding the data that can be input and will allow the users to store more accurate and useful information for their collections. ARKS has worked well, but there have always been areas where record keepers and registrars have wanted to do more or input data differently and this new programme will allow them to do this.

Record keeping systems such as ARKS allow users to store massive amounts of data, but not every collection is able to spare the time and/or human resources to input data into all available data fields. There are certain records that are more important to keep than others. However, in an ideal world every collection, both public and private, should keep every possible record of their birds, although this can be very time consuming and in reality is usually only possible in the largest zoos. There are a number of basic records, however, that should be kept by all individuals to help aid the future of aviculture. These essential records include:

Name of species

Ring details

Parentage

Age

Sex

Local ID (specific to your collection, e.g. each bird can be assigned a number from 1-100)

These six essential pieces of information can easily be stored/kept. As mentioned above, most public collections use a computer programme, but smaller collections and private individuals can simply use a basic spreadsheet on a computer, or an even easier method is to keep handwritten records on lined notepaper in a ring binder kept on a book shelf.

Having physical records of the birds in our collections, means that we can easily exchange information with other collections, leading to a better understanding of the birds in our collections and increased standards of husbandry. It also reduces human error, for we can all make mistakes, and by having a simple record of our birds we can, for example, easily check that we are sending the correct bird to another collection and that we are pairing

a male with a female and vice versa. Records also allow aviculturists to check the parentage of individual specimens before arranging exchanges. In recent years the parentage of our birds has become even more important, as the populations of many species have decreased and the availability of fresh stock/fresh blood has been greatly reduced due to the EU ban on the import of wild birds.

The future of aviculture depends on us keeping accurate records, if we are to ensure that the populations of the species currently being kept by aviculturists are to still be around for future generations to enjoy.

Simon Matthews is Senior Aviary Keeper and ARKS representative at the Rothschild Foundation, Waddesdon Manor Aviary, Waddesdon, near Aylesbury, Buckinghamshire HP18 0JH, UK. Website: www.waddesdon.org.uk E-mail: Simon.Matthews@nationaltrust.org.uk

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COMING GOOD

It seems as so the 2011 breeding season may have been the best breeding season yet for the Sumatran Laughingthrush *Garrulax bicolor*. At the beginning of September, Andrew Owen, Curator of Birds at Chester Zoo and European Studbook holder for this species, told me that they had two chicks in the nest at Chester and this species has also been bred this year at “Bristol, Waddesdon and Prague.” Andrew has promised to write some notes to bring members up to date on the progress that is being made breeding this laughingthrush whose chicks had, up until this year, always had to be hand-reared.

On the subject of whether or not the Sumatran Laughingthrush was once more common than it is today, and its numbers have declined as a result of the cage bird trade and/or habitat loss, it is interesting to note that when I was writing my biography of W. J. C. (Wilfred) Frost (see Vol.116, No.4, pp.158-183 (2010)), I found no reference to him ever having brought back this laughingthrush. This is despite the fact that he regularly brought back birds from Sumatra, including the Long-tailed Sibia *Heterophasia picaoides simillima*, which appears to occupy a similar range and similar habitat to the laughingthrush. I am unaware of any reference to this laughingthrush in UK aviculture prior to about 1987 (see Vol.114, No.3, p.132 (2008), Vol.115, No.1, p.40 (2009) & Vol.115, No.3, p.159 (2009)).

NEWS & VIEWS

BRED FOR THE FIRST TIME

I am grateful to my good friend Richard Meyer, who lives in north Devon, for sending a cutting from our regional newspaper the *Western Morning News*, p.6, August 20th 2011, showing one of two recently fledged Toco Toucans *Ramphastos toco* at Paignton Zoo, which is apparently begging for food from the male, who appears to be about to offer it a grape. It is the first time this species has bred at Paignton Zoo. The male came from Leeds Castle Aviary in 2004 and the female from Attica Zoo in Greece in 2010.

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BRED FOR ONLY THE SECOND TIME

Shortly after I received the above newspaper cutting, our regional BBC TV news programme featured an item about a Marabou chick *Leptoptilos crumeniferus* hatched earlier this year at Paignton Zoo, which included an interview with Senior Head Bird Keeper, Peter Smallbones. It is believed to be only the second Marabou ever to be bred in the UK, the first having been bred at Blackbrook Zoological Park in 1999 (see Vol.106, No.4, pp.182-184 (2000); see also Vol.111, No.2, pp.56-63 (2005)).

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RECORD NUMBER OF MACAWS BRED

Neville Brickell sent a cutting from a South African newspaper showing a Scarlet Macaw *Ara macao* perched on the head of Kimberly Marie Patrick, described in the picture caption as an adjudicator for Guinness World Records. The photograph was taken at Xcaret ecological park, south of Cancún in Mexico, where a "record breaking" total of 105 Scarlet and Military Macaws *A. militaris* have been hatched in captivity since 2009.

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LONG-LIVED BALD EAGLE DIES

Avicultural Society Chairman Christopher Marler has lost his female American Bald Eagle *Haliaeetus leucocephalus*, which arrived at Flamingo Gardens and Zoological Park from Canada as an injured, brown-headed immature bird (on a salvage permit) in 1980 and, between 1986-2007, raised a record breaking 30 young with her partner, a male hatched at Frankfurt Zoo in Germany.

NEW ARRIVALS AT LORO PARQUE

In August, Simon Bruslund (who is, of course, a Vice President of the Avicultural Society and a familiar name to readers of the *Avicultural Magazine*) became the new Curator of Birds at Loro Parque, Tenerife. Dr Matthias Reinschmidt, Zoological Director of the Loro Parque Fundación (LPF), said that Simon brings with him a wealth of practical experience of bird breeding and will further strengthen the team at Loro Parque.

Over a thousand young parrots had been reared by August. Without doubt the most important recent highlight had been the rearing of four young Lear's Macaws *Anodorhynchus leari*. The two proven breeding pairs each raised two chicks. These increased the LPF's number of Lear's Macaws to 27.

Four young Red-spectacled Amazons *Amazona pretrei* had fledged. Two were reared by their parents and two were hand-reared in the parque's baby station. There were three pairs of Festive Amazons *A. festiva bodini* with between one to three young. These were the second brood of young, those of the first brood having been successfully hand-reared in the baby station. The first clutch of eggs laid by the Yucatán Amazons *A. xantholara* were infertile, but two healthy chicks hatched from the second clutch and were easily reared and had already fledged and were flying about in the aviary with their parents.

A second highlight was the breeding of the Yellow-crowned Amazon *A. ochrocephala xantholaema*. It was the third successful breeding season for this pair, which this year raised a total of four young. This increases the population of this rarely kept subspecies to 10. The parque has a significant surplus of males, but believes the chances of building-up a self-sustaining captive-breeding population are gradually improving. Dr Reinschmidt says that the few breeders holding this subspecies need to work together very closely, otherwise there is a danger that this attractive subspecies could disappear from our aviaries.

By September the breeding season was beginning to wind down. Some species, however, such as the Hyacinth Macaw *Anodorhynchus hyacinthinus*, breed relatively late in the year. Three pairs had produced five chicks, while a further three young were progressing well in the baby station. Two further pairs were still incubating eggs.

Among Simon's first jobs on arriving at Loro Parque was to take on the difficult task of hand-rearing a tiny Desmarest's Fig Parrot *Psittaculirostris desmarestii occidentalis*. He took the chick home each evening in a portable incubator and fed the chick at regular intervals throughout the night and brought it back each morning. At the time of writing (September 2011) it was over five weeks old and was well on its way to growing into a fine young fig parrot.

A Short-tailed Parrot *Graydidascalus brachyurus* had fledged and could be seen sitting alongside its parents, as all three preened one another.

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NEWS FROM WUPPERTAL

In mid-August, I received an e-mail from Chris Brack alerting me to the news that the Brazilian Merganser *Mergus octosetaceus* has been bred in captivity for the first time, the breeding having occurred in Brazil. In *Wildfowl: An identification guide to ducks, geese and swans of the world* (Madge & Burns, 1988), it is described as one of the least known of all waterfowl - a secretive 'sawbill' living on fast-flowing rivers of central South America (southern Brazil and adjacent regions of eastern Paraguay and north-eastern Argentina).

A few days after the e-mail, I received by post, *Zoo Wuppertal 129. Jahresbericht 2010* - the zoo's *Annual Report* for last year. New arrivals in 2010 included: 1.0 King Penguin *Aptenodytes patagonica*, 2.2 Gentoo Penguins *Pygoscelis papua*, 0.1 King Eider *Somateria spectabilis*, 0.1 Harlequin Duck *Histrionicus histrionicus*, 1.1 Chinese Mergansers *M. squamatus*, 1.0 Sunbittern *Eurypyga helias*, 2.1 Beautiful Fruit Doves *Ptilinopus pulchellus*, 1.0 Snowy-crowned Robin-Chat *Cossypha niveicapilla*, 2.2 Long-tailed Tits *Aegithalos caudatus*, 1.1 White-lined Tanagers *Tachyphonus rufus*, 1.1 Paradise Tanagers *Tangara chilensis*, 1.3 Turquoise Tanagers *T. mexicana*, 3.3 Double-barred (Bicheno) Finches *Taeniopygia bichenovii* and 1.1 Hawfinches *Coccothraustes coccothraustes*.

Noteworthy among the species bred were 11 Elegant Crested Tinamous *Eudromia elegans*, two King Penguins, four African (Jackass or Black-footed) Penguins *Spheniscus demersus*, two Madagascar Crested Ibis *Lophotibis cristata*, two Buffleheads *Bucephala albeola*, a Bateleur *Terathopius ecaudatus*, two Red-crowned Cranes *Grus japonensis*, 34 Avocets *Recurvirostris avosetta*, five Cape Thick-knees *Burhinus capensis*, a Victoria Crowned Pigeon *Goura victoria*, two Blue-and-yellow Macaws *Ara ararauna*, two Toco Toucans *Ramphastos toco*, two Swallow-tailed Manakins *Chiroxiphia caudata*, a Barn Swallow *Hirundo rustica*, six Dunnocks *Prunella modularis*, seven Vermilion Flycatchers *Pyrocephalus rubinus*, five Brazilian Tanagers *Ramphocelus bresilius*, two Blue-faced Honeyeaters *Entomyzon cyanotis*, three Gouldian Finches *Erythrura gouldiae*, 20 Timor Zebra Finches *T. guttata* and three Bali Starlings *Leucopsar rothschildi*.

There is a colour photo of one of the two young manakins (p.13), a photo of one of the young Brazilian Tanagers begging for food from the male, which is not responding (p.16) and also a photo of the Victoria Crowned Pigeon chick on the nest with one of its parents (p.47).

WORKING WITH THE BLUE-CROWNED LAUGHINGTHRUSH

In Chester Zoo's *Z Magazine*, pp.11-13, Spring 2011, in an article about the Blue-crowned Laughingthrush *Dryonastes courtoisi*, illustrated by several wonderful photographs of this species taken in the wild in China, Roger Wilkinson the zoo's Head of Field Conservation & Research, wrote that the zoo first began keeping this species in 1993, when it received a pair from Leeds Castle Aviary, followed by two further pairs from Raymond Sawyer - President of the Avicultural Society. These birds bred for the first time at Chester in 1996 and subsequently bred there regularly each year until 2001, with Chester-bred birds being sent to Rode Tropical Bird Garden (which no longer exists), Paradise Park at Hayle here in Cornwall, Jersey Zoo, Mulhouse Zoo in France and Rotterdam Zoo in the Netherlands. There was then a gap of four years until, through the European Studbook, a new female was received from Leeds Castle Aviary. Since then chicks have been hatched each year and further Chester-bred birds have been sent to Paultons Park in Hampshire, Belfast Zoo, the Durrell Wildlife Conservation Trust (formerly Jersey Zoo), Rotterdam Zoo and Köln Zoo in Germany. Chester Zoo is one of only a few EAZA (European Association of Zoos and Aquaria) zoos which continues to regularly breed this Critically Endangered species.

A total of 122 Blue-crowned Laughingthrushes were, Roger wrote, listed on the ISIS international inventory on November 2nd 2010. Ninety-five of these were in Europe and 27 in the USA. During the previous 12 months, 19 had been hatched in Europe and one in the USA. A further 26 birds listed as Yellow-throated Laughingthrushes *D. galbanus* (of which *courtoisi* was originally considered to be a subspecies) are likely to be Blue-crowned Laughingthrushes, as the former remains unknown in captivity in Europe and North America. Laura Gardner, Curator of Birds at Leeds Castle Aviary has, since 2003, been the European Studbook holder for the Blue-crowned Laughingthrush and Mark Myers of Woodland Park Zoo, Seattle, manages the zoo population in the USA.

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STUDYING LILIAN'S LOVEBIRD

Last year Tiwonge Mzumara, financed by an award of £960 (approx. US\$1,600) from the African Bird Club, made two extended visits to Liwonde National Park in Malaŵi, to assess the current status in the park of the Near-threatened Lilian's or Nyasa Lovebird *Agapornis lilianae*.

The illegal hunting of birds for food is said to be prevalent in the park, with the favoured method often being to poison the small pools of water which the birds visit to drink during the dry season. However, during the

study only one poisoned waterhole was found, probably because of increased patrols introduced by the park's management. Outside of the park hunting occurs throughout the year, with local communities regarding the lovebirds as pests and poisoning and trapping them.

A total of 2,113 lovebirds were counted in the park during the study (approximately twice as many as had been estimated). They were mainly observed feeding on the seeds of *Acacia xanthophlea* and the fruits of *Capparis tomentosa*, as well as petals, sepals and immature fruits of *Adamsonia digitata*, the fruits of some *Ficus* spp. and the seeds of herbs and grasses.

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TWO NEW PAIRS OF HORNBILLS

Having previously adopted a pair of Bushy-crested Hornbills *Anorrhinus galeritus* (in 2002) and later a pair of Rhinoceros Hornbills *Buceros rhinoceros*, followed by a pair of Great Hornbills *B. bicornis*, this year the society has adopted a pair of White-crowned Hornbills *Berenicornis comatus* and a pair of Wreathed Hornbills *Aceros undulatus* in southern Thailand, as part of the Hornbill Research Foundation's, Hornbill Family Adoption Program. This is the program in which local villagers who previously took hornbill chicks from their nests to sell, now guard the nests and collect valuable research data.

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NEW ARRIVALS FROM NORTH AFRICA

Two juvenile North African Ostriches *Struthio c. camelus* have arrived at Paignton Zoo Environmental Park in south Devon, here in the UK, as part of a European conservation plan. The two males, described as "feisty characters", already stand more than 1.8m (6ft) tall and may eventually weigh as much as 158kg (350lb).

Hannover Zoo in Germany, which is leading the conservation effort, collected 28 eggs from birds living in Souss Massa National Park near Agadir in Morocco. Eighteen chicks hatched, but there were only six females. More females will, it is hoped, be brought in later.

This red-necked subspecies (considered by some to be a full species) has disappeared from 12 of the 18 countries in which it used to be found in North Africa. The only significant population outside of Morocco is in Niger, where there may only be about 60 birds.

THE JEWEL HUNTER

Chris Gooddie turned his back on a successful job in order to satisfy his dream of seeing all of the world's 32 species of pittas in the wild in a single year. To do so he travelled more than 200,000km (124,275 miles) through Thailand, Malaysia, Taiwan, Sabah, Vietnam, the Philippines, Indonesia, Australia, Sri Lanka, Manus (one of the Admiralty Islands and home to the Superb Pitta *Pitta superba*) and the Solomon Islands, as well as visiting the Kibale Forest in south-west Uganda, where he saw and photographed the Green-breasted Pitta *P. reichenowi* and Zambia, close to the border with Zimbabwe, to find the African Pitta *P. angolensis* - though on that occasion his camera failed to work at the crucial moment. Chris tells the story of his pursuit of all 32 species of pittas and some of the other 2,000 species of birds he saw during his year long journey in his book *The Jewel Hunter* published by Wild Guides, Old Basing.

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AWARDS FOR 2010

At the recent Council Meeting held at Paultons Park on September 24th 2011, members of the council decided that the D. H. S. Risdon Award for the most informative article in the magazine during 2010, should go to J. J. Elston, K. Unger and R. Dunn of Fort Worth Zoo for their article on the reproductive behaviour of the Saddle-billed Stork *Ephippiorhynchus senegalensis* and the developmental behaviour of the chicks (Vol.116, No.3, pp.100-108).

The Dulcie Cooke Award for the best photographs in the magazine during 2010, was awarded to Pierre de Chabannes for his photographs illustrating the accounts of his visit to Parc de Clères (Vol.116, No.1, pp.16-24), Taipei Zoo (Vol.116, No.2, pp.63-73) and Weltvogelpark Walsrode (Vol.116, No.3, pp.109-127).

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ADDITIONAL SOURCES OF INFORMATION

Have you visited the Avicultural Society website - <http://www.avisoc.co.uk> - lately or seen us on Facebook - <http://en-gb.facebook.com/pages/The-Avicultural-Society/192426724136286>

OBITUARY

STEWART PYPER

The sudden and unexpected death of Stewart Pyper came as a great shock to his fellow council members. Stewart will be greatly missed by the members of the council and all his many friends in the bird world, who knew him personally or through their dealings with the Avicultural Society and before that the Foreign Bird League.

Stewart phoned me on Monday morning, October 17th, to discuss society business and enquire about the progress of the next issue of the magazine. He invariably phoned me each Monday morning and perhaps once or twice during the course of the week and on this occasion, as on previous occasions, he sounded his usual bright and breezy self, and there was not the slightest hint that anything might have been amiss. Immediately after calling me, he spoke to the Avicultural Society President, Raymond Sawyer, and called Raymond again early that evening and talked about writing a piece for the magazine about Raymond's recent 87th birthday celebration and of visiting Raymond at Chestnut Lodge the following week. It seems that Raymond may have been the last person to have spoken to Stewart, because when John Ellis phoned later that evening, there was no answer.

A few weeks earlier Stewart had been among those manning the society's stand at this year's National Exhibition, hosted by the Parrot Society UK, at the Staffordshire County Showground, he had taken part in the society's visit to Germany and had been largely responsible for organising our Autumn Social Meeting at Paultons Park.

Stewart had been an Avicultural Society council member for a great many years and had been closely involved in all aspects of the smooth running of the society. He is probably irreplaceable and, as I wrote earlier, will be greatly missed.

We hope to publish a fuller appreciation in the next issue of the magazine

Malcolm Ellis

NEW CHAIRMAN OF THE WORLD PHEASANT ASSOCIATION

Dr Richard Carden has been elected the new Chairman of the World Pheasant Association (WPA). He succeeds Prof. Tim Lovel, a co-founder of the WPA in 1975, who has long played a prominent role in the World Pheasant Association. Richard Carden is a former career civil servant and Director General of the Ministry of Agriculture, Fisheries and Food (MAFF), the predecessor of DEFRA (Department for Environment, Food & Rural Affairs). He is also a member of the BTO (British Trust for Ornithology), the Norfolk Wildlife Trust and a former assistant warden at Lundy Bird Observatory off the coast of north Devon.

* * *

NEW CURATOR

Josef Lindholm, who until very recently was Senior Aviculturist at Dallas World Aquarium, is the new Curator of Birds at Tulsa Zoo and Living Museum, which occupy an 84 acres (approx. 34 hectares) site in Mohawk Park, the third largest municipal park in the USA. Tulsa Zoo and Living Museum, which have nearly 600,000 visitors a year, currently exhibit more than 2,800 animals, many of these rare and endangered. We look forward to hearing from Josef, with news of the bird collection.

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AVICULTURAL MAGAZINE BACK ISSUES

The Avicultural Society is keen to reduce its large stock of back issues. These have been sorted by year into complete sets and are being offered for sale at the reduced price of £5 per set, per year, plus postage at cost.

Complete sets are available for the years: 1928, 1932, 1934, 1935, 1936, 1937, 1938, 1939, 1941, 1942, 1943, 1944, 1945, 1948, 1949, 1950, 1951, 1953, 1954, 1955, 1956, 1957, 1958, 1959, 1960, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1973, 1976, 1977, 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990, 1991, 1992, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008 and 2009.

Before sending any money, it is advisable to check that the magazines you require remain available. To do so, please contact Peter Stocks, The Hon. Secretary and Treasurer, The Avicultural Society, Sheraton Lodge, Station Road, Southminster, Essex CM0 7EW,. Tel: 01621 772427/E-mail: otusscops@talktalk.net



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